Amendmemts to the Claims:

The listing of the claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-22 (canceled)

Claim 23 (currently amended): A method of identifying genes associated with osteogenesis or adipogenesis that are modulated by ΔFosB comprising

(a) inducing ΔFosB in a cell associated with osteogenesis or adipogenesis; and

(b) determining which genes associated with osteogenesis or adipogenesis are differentially expressed in said cell, thereby identifying genes that are modulated by ΔFosB.

Claim 24 (previously presented): The method of claim 23, wherein step (b) is performed using a yeast two-hybrid system or hybridization of cellular nucleic acids to a DNA chip.

Claims 25-30 (canceled)

Claim 31 (previously presented): The method of claim 23, wherein the cell is an *in vitro* cell.

Claim 32 (previously presented): The method of claim 31, wherein the cell is selected from the group consisting of calvarial cell, osteoblast, osteoclast, chondrocyte, and pluripotent precursor cell.

Claim 33 (previously presented): The method of claim 32, wherein the osteoblast is

selected from the group consisting of MC3T3-E1, C2C12, MG-63, U2OS, UMR106, ROS 17/2.8, and SaOS2.

Claim 34 (previously presented): The method of claim 31, wherein the method further comprises obtaining cell lysates from the *in vitro* cell for determining which genes are differentially expressed.

Claim 35 (previously presented): The method of claim 31, wherein the method further comprises obtaining nuclear extracts from the *in vitro* cell for determining which genes are differentially expressed.

Claim 36 (previously presented): The method of claim 23, wherein inducing ΔFosB comprises exposing the cell to an agent selected from the group consisting of cocaine, amphetamine, nicotine, opiate, antidepressant, and antipsychotic agent.

Claim 37 (previously presented): The method of claim 23, wherein the cell is an *in vivo* cell.

Claim 38 (previously presented): The method of claim 23, wherein the cell is in an animal.

Claim 39 (previously presented): The method of claim 38, wherein the animal is a transgenic animal.

Claim 40 (previously presented): The method of claim 23, wherein the method is performed in a high throughput format.

Claim 41 (previously presented): The method of claim 23, wherein the method is performed using a DNA chip.

Claim 42 (previously presented): The method of claim 23, wherein step (b) comprises isolating RNA from the cell.

Claim 43 (previously presented): The method of claim 42, wherein step (b) comprises obtaining an RNA expression pattern.

Claim 44 (previously presented): The method of claim 43, wherein the RNA expression pattern is obtained using a DNA chip, Northern analysis, RT PCR, RNase protection, or subtractive hybridization.

Claim 45 (currently amended): A method of identifying genes associated with osteogenesis or adipogenesis that are modulated by ΔFosB comprising

(a) inducing ΔfosB in a cell culture, wherein the cells are associated with osteogenesis or adipogenesis; and

(b) determining which genes associated with osteogenesis or adipogenesis are differentially expressed in said cells, thereby identifying genes that are modulated by ΔFosB.

Claim 46 (previously presented): A method of claim 45, wherein the method is performed using cell lysates.

Claim 47 (previously presented): A method of claim 45, wherein the method is performed using nuclear extracts.

Claim 48 (new): A method of claim 31, wherein the cell is selected from the group consisting of adipocyte and preadipocyte.

Claim 49 (new): A method of claim 48, wherein the adipocyte is selected from the group

consisting of 3T3 F422 A, and ob 1771.

Claim 50 (new): A method of claim 49, wherein the preadipocyte is 3T3-L1 preadipocyte.